

REMARKS

Reconsideration of the present application in view of the above amendments and following remarks is respectfully requested.

Upon entry of the foregoing amendments, Claims 1, 4 to 12, 14, 15, 23, and 26 to 51 will be presently pending. Claims 16 to 22 have been withdrawn from consideration. Claims 2, 3, 24 and 25 have been cancelled, without prejudice. Claims 1 and 23 have been amended, without prejudice. The amendments to Claims 1 and 23 are supported by the claims as filed (Claims 3 and 25) and in the specification, in particular at page 4, paragraph 2. No new matter has been added. Applicants hereby reserve the right to pursue such claims as originally presented, or claims of a similar scope, in a related application.

DOUBLE PATENTING REJECTION

The Examiner has provisionally rejected Claims 1 to 12, 14 to 15, 23 to 34 and 42 as being allegedly unpatentable over Claims 1 to 45 of co-pending Application No. 10/679,871 (hereinafter "the '871 application") in view of U.S. Patent No. 5,891,942 to Parish et al. (hereinafter "Parish"). Although applicants respectfully disagree, in the event that subject matter is found allowable, applicants will consider the filing of a terminal disclaimer.

PROVISIONAL REJECTION UNDER 35 U.S.C. 103(a)

The Examiner has provisionally rejected Claims 1 to 12, 14 to 15, 23 to 34 and 42 as being allegedly obvious over the '871 application, which the Examiner alleges to be prior art if published or patented. Applicants respectfully traverse the present rejection as the '871 application is not available as art under 35 U.S.C. § 102(e) and as a provisional rejection under 35 U.S.C. § 103(a) is improper where there is a common assignee.

A) The '871 Application is Not Available under 35 U.S.C. § 102(e)

The present rejection is respectfully traversed as the '871 application is not available as prior art under 35 U.S.C. § 102(e). In general, an application is available for use as a 102(e) reference when it is invented by another, published, and filed in the U.S. before the invention by the applicant for patent (*see* MPEP § 706.02). However, the '871 application was not filed before the filing date of the presently claimed invention and thus is not available as a 102(e) reference.

The 35 U.S.C. 102(e) critical reference date of a U.S. patent or U.S. application publications and certain international application publications entitled to the benefit of the filing date of a provisional application under 35 U.S.C. 119(e) is the filing date of the provisional application. MPEP § 706.02(f)(1). The '871 application was filed on October 6, 2003 and claims priority to U.S. Provisional Application No. 60/425,091, filed on November 8, 2002. The present application was filed on October 6, 2003 and claims priority to U.S. Provisional Application No. 60/425,099, filed on November 8, 2002. Accordingly the '871 application and the present application both have an effective filing date of November 8, 2002; the classification of the '871 application as a reference under 102(e) is therefore improper.

B) The 35 U.S.C. §103(a) Rejection is Improper

The present rejection is respectfully traversed as, even assuming *arguendo* that the '871 application is available as prior art under 35 U.S.C. § 102(e) (which it is not), a provisional 35 U.S.C. § 103(a) rejection cannot be made using 35 U.S.C. § 102(e) prior art between commonly assigned applications. "[A] provisional rejection under 35 U.S.C. § 103(a) using prior art under 35 U.S.C. § 102(e) is not proper if the application contains evidence that the application and the prior art reference were commonly owned or subject to an obligation of assignment to the same person, at the time the invention was made". MPEP § 2136.01 (citing *In re Irish*, 433 F.2d 1342, 167 USPQ 764 (CCPA 1970)). Both the '871 application and the present application were, at the time the present invention was made, subject to an obligation of assignment to the same company, namely Illinois Tool Works Inc. Accordingly, the '871 application and the present application have a common assignee, and thus the provisional 103(a) rejection is improper.

REJECTIONS UNDER 35 U.S.C. 103(a)

Claims 1 to 5, 9 to 12, 14 to 15, 23, to 26, 30 to 41 and 45 to 51 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over European Patent No. 0875546 to Parish et al. (hereinafter "Parish"). The present rejection is respectfully traversed. One of ordinary skill in the art at the time of the present invention, when presented with the disclosure of Parish, would not have been motivated to produce the presently claimed invention.

Claims 6 to 8, 27 to 29 and 42 to 44 are rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Parish in view of U.S. Patent No. 6,015,845 to Yonetani et al. ("Yonetani") or U.S. Patent No. 6,489,396 to Nakamura et al. ("Nakamura"). The present rejection is respectfully traversed. One of ordinary skill in the art at the time of the present invention, when presented with the disclosures of Parish and Yonetani or Parish and Nakamura

at the time of the present invention, would not have been motivated to produce the presently claimed invention.

THE CLAIMED SUBJECT MATTER IS NOVEL AND PATENTABLY UNOBVIOUS

A) The Claimed Invention

Independent Claims 1 and 23 as now pending are directed to an adhesive composition comprising **from about 10 wt % to about 25 wt %** of a polymerizable vinyl ester compound, an ethylenically unsaturated monomer, reactive multifunctional acrylate, curing catalyst and activator. Independent claim 1 further recites that the composition has a ***pull out performance after one hour at a temperature of 23°C of at least about 70 KN***. Independent claim 37 is directed to an adhesive composition comprising a polymerizable vinyl ester compound, an ethylenically unsaturated **aromatic** monomer, from about 5 wt % to about 10 wt % of reactive multifunctional acrylate, curing catalyst and activator.

B) The Cited Patents

Parish discloses a **coating composition** comprising a vinyl ester, a **non-aromatic** multifunctional acrylate which serves as a reactive diluent, a catalyst, and an optional activator (*see* Parish, paragraphs [0006], [0008], [0012], [0016] and [0017]). Parish does not teach or suggest an **adhesive composition**, or expressly disclose or suggest anything respecting adhesive compositions. Parish does not contain a specific disclosure of amounts at which the vinyl ester may be present in the composition. Parish also does not disclose any pull out performance test results.

Yonetani discloses an adhesive composition comprising an epoxy acrylate resin which may contain a vinyl ester group, a reactive monomer comprising an ester of carboxylic acid and an alcohol, a curing agent comprising an organic peroxide, and an accelerator comprising an tertiary aromatic amine containing a hydroxyl group in a nitrogen substituent (*see* Col. 2, lines 31 to 63; Col. 3, lines 1 to 48). Yonetani discloses that the resin is present in an amount of **30 wt % to 90 wt %** (*see* Col. 3, lines 22 to 27). In particular, Yonetani exemplifies adhesive compositions containing the resin in the amount of 39 wt% (Examples 11 to 19), 54 wt% (Examples 4 to 10), 44 wt% (Examples 1 and 3) and 64 wt% (Example 2) (*see* Col. 5 to Col. 9). The tensile load performance of such compositions after 24 hours at 60°C ranged from 6 to 6.7 tons (**53.4 to 59.6 KN**) (*see* Col. 5, lines 32 to 67, Col. 6, lines 1 to 10, Col 9-12, Table 1).

Applicants note that these values are much less than the 70 KN pull out performance of the present invention.

Nakamura discloses a resin composition for use in adhesive compositions comprising methacrylate ester-based polymer which may contain a vinyl ester group, the polymer comprising at least one alkylcyclohexylester of methacrylic acid monomer, and an at least di-functional crosslinking agent (see Col. 2, lines 37 to 48). Nakamura does not contain a specific disclosure of amounts at which the resin may be present in an adhesive composition. Nakamura also does not disclose any pull out performance test results.

**C) The Cited Patents Do Not Suggest
The Claimed Range of Reactive Multifunctional Acrylate**

One of ordinary skill in the art, when presented with the disclosure of Parish at the time of the present invention, would not be motivated to produce an adhesive composition or modify Parish to produce the presently claimed adhesive composition. Parish does not disclose or suggest the polymerizable vinyl ester present in an amount of from about 10 wt % to about 25 wt % as recited in independent claims 1 and 23. Further, Parish contains no suggestion that would motivate one of ordinary skill at the time of the present invention to modify the disclosure of Parish to use the concentration of polymerizable vinyl ester of claims 1 and 23. One of ordinary skill in the art at the time of the present invention, when presented with the disclosure of Parish, would not have been motivated to produce the present invention. As such, independent claims 1 and 23 and dependent claims therefrom are patentably non-obvious over Parish for at least this reason.

Assuming, *arguendo*, that Parish is properly combinable with Yonetani or Nakamura (which it is not), such combination also does not disclose or suggest the polymerizable vinyl ester present in an amount of from about 10 wt % to about 25 wt % as recited in independent claims 1 and 23. In particular, the Yonetani discloses polymerizable vinyl ester in an amount of 30 wt % to 90 wt %, whereas Nakamura is silent on the desired percentage of the polymerizable vinyl ester in any adhesive composition. As such, both Yonetani and Nakamura do not provide the disclosure of the about 10 wt % to about 25 wt % of polymerizable vinyl ester missing from Parish and required by independent claims 1 and 23.

Further, such patents contain no suggestion that would motivate one of ordinary skill at the time of the present invention to modify such disclosures to use the concentration of polymerizable vinyl ester of the claims 1 and 23. Yonetani and Nakamura therefore each do not provide any motivation to use the presently claimed amount of polymerizable vinyl ester. One of

ordinary skill in the art at the time of the present invention, when presented with the disclosures of the Parish and Yonetani or Parish and Nakamura, would not have been motivated to produce the present invention. As such, independent claims 1 and 23 and dependent claims therefrom are patentably non-obvious over the combination of Parish with Yonetani or Nakamura for at least this reason.

**D) The Superior Pull-Out Performance is
Unexpected in view of The Cited Patents**

Parish does not disclose or suggest the unexpectedly superior pull out performance after one hour at a temperature of 23°C of at least about 70 KN as recited in independent claim 1 (*see* specification at page 4, paragraph 2; page 6, paragraph 4). Further, Parish contains no suggestion that would motivate one of ordinary skill at the time of the present invention to modify the **coating** composition of Parish with the reasonable expectation of obtaining an **adhesive** composition having the pull-out performance values of the present invention. The Action, however, asserts that the adhesive compositions produced by Parish inherently exhibit the claimed pull-out performance as Parish produces an allegedly "analogous chemical formulated composition". The Examiner does not identify any other rationale or evidence to support such an allegation of inherency.

In this situation, however, Parish does not in fact disclose the presently claimed composition, in particular at least the presence of a polymerizable vinyl ester in the amount of about 10 wt % to about 25 wt %. Where the compositions are not the same, an allegation of inherency without a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art is insufficient to establish inherency (*see* MPEP § 2112 "the fact that a certain result or characteristic may occur is not sufficient to establish the inherency of that result or characteristic"). Accordingly, inherency in Parish of the claimed pull out performance values has not been established. As such, independent claim 1 and dependent claims therefrom are patentably non-obvious over Parish for at least this reason.

Furthermore, Parish and Yonetani or Nakamura together do nothing to suggest the highly desirable pull out performance achieved by the invention as now claimed. Thus, the results of the invention as now claim is unexpected and surprising in view of the teachings of the prior patents. For example, the compositions of Yonetani are described as achieving a tensile

load performance tests, with pull out performance after **24 hours** at **60°C** of from 6 to 6.7 tons (**53.4 to 59.6 KN**). Nakamura discloses no pull out performance tests. In dramatic contrast, the compositions as now claimed achieve superior performance after **one hour** at **23°C**. For example, as recited in claim 1, the compositions of the present inventions achieve a greater performance (**at least about 70 KN**) after a much shorter cure time (**23 hours less**) and at a much lower temperature (**37°C cooler**). This result is truly extraordinary and surprising. One of ordinary skill in the art would not expect that an adhesive composition formulated with a different concentration of polymerizable vinyl ester than Yonetani would exhibit such unexpectedly higher pull-out performance values. As such, the pending claims are patentably non-obvious over the combination of Parish with Yonetani or Nakamura for at least this reason.

**E) The Cited Patents Do Not Suggest
Use of Aromatic Monomer in Place of Non-Aromatic Monomer**

One of ordinary skill in the art **would not** combine the disclosure of Parish with that of either Yonetani or Nakamura because they teach in **opposite directions**. Parish teaches the exclusion of aromatic monomers, thus only teaching the use of non-aromatic monomers. Yonetani and Nakamura teach that both aromatic and non-aromatic monomers may be used. Such teachings are opposite to each other, and as such, one of ordinary skill in the art would not exchange one for the other. Accordingly, one of ordinary skill in the art at the time of the present invention, when presented with the disclosures of Parish and Yonetani or Parish and Nakamura, would have no reason or motivation to replace the non-aromatic monomer of Parish with the aromatic monomer as recited in independent claim 37. As such, independent claim 37 is patentable over Parish, Yonetani and Nakamura for at least this reason.

CONCLUSION

In view of the above amendments and remarks, the present application is in condition for allowance and a Notice of Allowance is therefore earnestly solicited. The Office is invited to contact applicant's undersigned counsel by telephone to resolve any further matters in connection with this application.

A petition for a three-month extension of time and the requisite fee is enclosed herewith. Furthermore, the Commissioner is hereby authorized to charge any additional fees which may

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be associated with this communication or credit any overpayment to Deposit Account No. 19-5425.

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